



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/726,535

12/04/2003

Eung Min Park

0630-1874P

5940

2292

7590

11/20/2007

BIRCH STEWART KOLASCH & BIRCH

PO BOX 747

FALLS CHURCH, VA 22040-0747

EXAMINER

MORRISON, THOMAS A

ART UNIT

PAPER NUMBER

3653

NOTIFICATION DATE

DELIVERY MODE

11/20/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/726,535	Applicant(s) PARK, EUNG MIN	
	Examiner Thomas A. Morrison	Art Unit 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 7 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 is/are allowed.
- 6) ☒ Claim(s) 7 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 10 is objected to because of the following informalities: (1) "an outer surface" in line 6 should be -- outer surfaces --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the thickness" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the stiffness" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,934,665 (Kasahara) in view of U.S. Patent No. 5,615,874 (Parthasarathy et al.).

Regarding claim 7, Figs. 1-5 of Kasahara show a media pick-up device of a media dispenser (Fig. 1), comprising:

a plurality of conveying rollers (31a) rotated by a driving force of a driving means (i.e., gears in Fig. 5), for conveying media;

first separating rollers (i.e., the 3 innermost rollers 32a, 32a and 32a in Fig. 3) arranged with overlaps to the conveying rollers (31a) to separate the media one by one; and

second separating rollers (i.e., the two outermost rollers 32a and 32a in Fig. 3) arranged to face an outer surface of the conveying rollers (31a) with gaps between the second separating rollers (two outermost rollers 32a and 32a in Fig. 3) and the conveying rollers (31a), for generating a frictional force to the media;

wherein a torsion spring (38 in Fig. 4) for providing an elastic force to push the first and second separating rollers to the conveying rollers is installed on a shaft (32c) to which the first and second separating rollers are fixed. Regarding the recitation "for

generating a frictional force to the media", this is a statement of intended use that has not been given patentable weight. Also, the second separating rollers (i.e., the two outermost rollers 32a and 32a in Fig. 3) have rounded portions that are arranged to face outer faces and/or outer peripheral surfaces (i.e., outer surfaces) of the conveying rollers (31a), and there are gaps (e.g., horizontal gaps) between the second separating rollers (two outermost rollers 32a and 32a in Fig. 3) and the conveying rollers (31a). The Kasahara patent discloses a torsion spring (38 in Fig. 4) between a bracket (i.e., unnumbered bracket connected to 32c) rotatably supported on the shaft (32c) and a main body (near 12 in Fig. 4), but does not specifically disclose that such torsion spring comprises a plate spring, as claimed.

The Parthasarathy et al. patent discloses that it is well known to provide a separating mechanism (including 40a) with a torsion spring (60) that is a plate spring for the purpose of urging such separating mechanism toward a roller (54). Because Kasahara and Parthasarathy et al. teach separating mechanisms (including rollers 32a in Fig. 3 of Kasahara, and including element 40a of Parthasarathy et al., respectively) that are urged by springs toward a roller, it would have been obvious to one skilled in the art to substitute the spring (60) of Parthasarathy et al. for the spring (38) of Kasahara to achieve the predictable result of urging the separating mechanism (including rollers 32a) of Kasahara toward the roller (31a) of Kasahara. Thus, all of the limitations of claim 7 are met by this combination of references.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,934,665 (Kasahara) in view of Japanese Publication No. 3-83741.

Regarding claim 7, Figs. 1-5 of Kasahara show a media pick-up device of a media dispenser (Fig. 1), comprising:

a plurality of conveying rollers (31a) rotated by a driving force of a driving means (i.e., gears in Fig. 5), for conveying media;

first separating rollers (i.e., the 3 innermost rollers 32a, 32a and 32a in Fig. 3) arranged with overlaps to the conveying rollers (31a) to separate the media one by one; and

second separating rollers (i.e., the two outermost rollers 32a and 32a in Fig. 3) arranged to face an outer surface of the conveying rollers (31a) with gaps between the second separating rollers (two outermost rollers 32a and 32a in Fig. 3) and the conveying rollers (31a), for generating a frictional force to the media;

wherein a torsion spring (38 in Fig. 4) for providing an elastic force to push the first and second separating rollers to the conveying rollers is installed on a shaft (32c) to which the first and second separating rollers are fixed. Regarding the recitation "for generating a frictional force to the media", this is a statement of intended use that has not been given patentable weight. Also, the second separating rollers (i.e., the two outermost rollers 32a and 32a in Fig. 3) have rounded portions that are arranged to face outer faces and/or outer peripheral surfaces (i.e., outer surfaces) of the conveying rollers (31a), and there are gaps (e.g., horizontal gaps) between the second separating rollers (two outermost rollers 32a and 32a in Fig. 3) and the conveying rollers (31a).

The Kasahara patent discloses a torsion spring (38 in Fig. 4) between a bracket (i.e., unnumbered bracket connected to 32c) rotatably supported on the shaft (32c) and a main body (near 12 in Fig. 4), but does not specifically disclose that such torsion spring comprises a plate spring, as claimed.

Japanese Publication No. 3-83741 discloses that it is well known to provide a separating mechanism (including 33) with a torsion spring (32) that is a plate spring for the purpose of urging such separating mechanism toward a roller (34). Because Kasahara and Japanese Publication No. 3-83741 teach separating mechanisms (including rollers 32a in Fig. 3 of Kasahara, and including element 33 of Japanese Publication No. 3-83741, respectively) that are urged by springs toward a roller, it would have been obvious to one skilled in the art to substitute the spring (32) of Japanese Publication No. 3-83741 for the spring (38) of Kasahara to achieve the predictable result of urging the separating mechanism (including rollers 32a) of Kasahara toward the roller (31a) of Kasahara. Thus, all of the limitations of claim 7 are met by this combination of references.

Allowable Subject Matter

5. Claim 2 is allowed. Claim 10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.


Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/2/2007


PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600